

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A printer operable in a duplex print mode for printing an image on one side of a sheet-like recording medium and then printing an image on the other side of said sheet-like recording medium, said printer comprising:

at least one print drum; and

at least one press roller facing said print drum for pressing the recording medium against said print drum;

wherein said press roller comprises, when configured to press the other side of the recording medium against said print drum, an elastic body having a fluorine compound layer on a surface thereof, said fluorine compound layer including a film tube closely fitted on the surface of said elastic body.

Claim 2 (Currently Amended): The printer as claimed in claim 1, wherein said elastic body comprises rubber ~~while said fluorine compound layer comprises a film tube closely fitted on the surface of said elastic body.~~

Claim 3 (Original): The printer as claimed in claim 1, wherein said elastic body comprises rubber while said fluorine compound layer is formed by coating.

Claim 4 (Original): The printer as claimed in claim 1, further comprising cleaning means for removing ink deposited on a surface of said press roller.

Claim 5 (Original): The printer as claimed in claim 4, wherein said cleaning means is located between a position for transferring an image to the recording medium and a position

for refeeding the recording medium, which carries the image on one side thereof, in a direction of rotation of said press roller.

Claim 6 (Original): The printer as claimed in claim 4, wherein said cleaning means comprises:

a roller pressed against said press roller by preselected pressure for wiping off ink deposited on said press roller; and

drive means for causing said roller to rotate at a peripheral speed different from a peripheral speed of said press roller.

Claim 7 (Original): The printer as claimed in claim 6, wherein at least a surface of said roller is porous.

Claim 8 (Original): The printer as claimed in claim 4, wherein said cleaning means comprises:

coating means for coating a small amount of liquid on the surface of said press roller; and

a blade contacting the surface of said press roller.

Claim 9 (Original): The printer as claimed in claim 1, further comprising a roller pressed against said press roller by preselected pressure for removing ink deposited on the surface of said press roller by causing said ink to be transferred to said roller.

Claim 10 (Original): The printer as claimed in claim 9, wherein said roller comprises an elastic roller having an adhesive surface while said elastic roller comprises rubber and is caused to rotate by said press roller.

Claim 11 (Original): The printer as claimed in claim 9, wherein said roller is formed of either one of rubber and metal and has a smooth surface, said printer further comprising a blade configured to scrape off the ink deposited on said smooth surface.

Claim 12 (Currently Amended): In a printer operable in a duplex print mode by forming in a master a first and a second image, which are to be respectively transferred to one side and the other side of a sheet-like recording medium, side by side in a circumferential direction of a print drum, wrapping said master around said print drum, pressing said sheet-like recording medium against said print drum with a press roller to thereby print said first image on said one side, and then pressing said sheet-like recording medium against said print drum with said press roller to thereby print said second image on said other side, said press roller comprises an elastic body having a fluorine compound layer on a surface thereof, said fluorine compound layer including a film tube closely fitted on the surface of said elastic body.

Claim 13 (Currently Amended): The printer as claimed in claim 12, wherein said elastic body comprises rubber ~~while said fluorine compound layer comprises a film tube closely fitted on the surface of said elastic body.~~

Claim 14 (Original): The printer as claimed in claim 12, wherein said elastic body comprises rubber while said fluorine compound layer is formed by coating.

Claim 15 (Original): The printer as claimed in claim 12, further comprising cleaning means for removing ink deposited on a surface of said press roller.

Claim 16 (Original): The printer as claimed in claim 15, wherein said cleaning means is located between a position for transferring an image to the recording medium and a position for refeeding the recording medium, which carries the image on one side thereof, in a direction of rotation of said press roller.

Claim 17 (Original): The printer as claimed in claim 15, wherein said cleaning means comprises:

a roller pressed against said press roller by preselected pressure for wiping off ink deposited on said press roller; and

drive means for causing said roller to rotate at a peripheral speed different from a peripheral speed of said press roller.

Claim 18 (Original): The printer as claimed in claim 17, wherein at least a surface of said roller is porous.

Claim 19 (Original): The printer as claimed in claim 15, wherein said cleaning means comprises:

coating means for coating a small amount of liquid on the surface of said press roller; and

a blade contacting the surface of said press roller.

Claim 20 (Original): The printer as claimed in claim 12, further comprising a roller pressed against said press roller by preselected pressure for removing ink deposited on the surface of said press roller by causing said ink to be transferred to said roller.

Claim 21 (Original): The printer as claimed in claim 20, wherein said roller comprises an elastic roller having an adhesive surface while said elastic roller comprises rubber and is caused to rotate by said press roller.

Claim 22 (Original): The printer as claimed in claim 20, wherein said roller is formed of either one of rubber and metal and has a smooth surface, said printer further comprising a blade configured to scrape off the ink deposited on said smooth surface.

Claims 23-33 (Canceled).

Claim 34 (Original): A printer operable in a duplex print mode for printing an image on one side of a sheet-like recording medium and then printing an image on the other side of said sheet-like recording medium, said printer comprising:

at least one print drum; and

at least one press roller facing said print drum for pressing the sheet-like pressing member against said print drum;

wherein said press roller comprises, when configured to press the other side of the sheet-like recording medium against said print drum, an elastic body on which a film, formed with fine projections by surface treatment, is coated or adhered.

Claim 35 (Original): The printer as claimed in claim 34, wherein said elastic body comprises rubber while said film comprises at least one of fine glass grains and fine ceramic grains.

Claim 36 (Original): The printer as claimed in claim 35, wherein said fine glass grains and said fine ceramic grains both are spherical.

Claim 37 (Original): The printer as claimed in claim 35, wherein said fine glass grains and said fine ceramic grains both are not spherical.

Claim 38 (Original): The printer as claimed in claim 34, further comprising cleaning means for removing ink deposited on a surface of said press roller.

Claim 39 (Original): The printer as claimed in claim 38, wherein said cleaning means is located between a position for transferring an image to the recording medium and a position for refeeding the recording medium, which carries the image on one side thereof, in a direction of rotation of said press roller.

Claim 40 (Original): The printer as claimed in claim 38, wherein said cleaning means comprises:

a roller pressed against said press roller by preselected pressure for wiping off ink deposited on said press roller; and

drive means for causing said roller to rotate at a peripheral speed different from a peripheral speed of said press roller.

Claim 41 (Original): The printer as claimed in claim 40, wherein at least a surface of said roller is porous.

Claim 42 (Original): The printer as claimed in claim 38, wherein said cleaning means comprises:

coating means for coating a small amount of liquid on the surface of said press roller;
and
a blade contacting the surface of said press roller.

Claim 43 (Original): The printer as claimed in claim 34, further comprising a roller pressed against said press roller by preselected pressure for removing ink deposited on the surface of said press roller by causing said ink to be transferred to said roller.

Claim 44 (Original): The printer as claimed in claim 43, wherein said roller comprises an elastic roller having an adhesive surface while said elastic roller comprises rubber and is caused to rotate by said press roller.

Claim 45 (Original): The printer as claimed in claim 34, wherein said roller is formed of either one of rubber and metal and has a smooth surface, said printer further comprising a blade configured to scrape off the ink deposited on said smooth surface.

Claim 46 (Original): In a printer operable in a duplex print mode by forming in a master a first and a second image, which are to be respectively transferred to one side and the other side of a sheet-like recording medium, side by side in a circumferential direction of a print drum, wrapping said master around said print drum, pressing said sheet-like recording

medium against said print drum with a press roller to thereby print said first image on said one side, and then pressing said sheet-like recording medium against said print drum with said press roller to thereby print said second image on said other side, said press roller comprises an elastic body on which a film, formed with fine projections by surface treatment, is coated or adhered.

Claim 47 (Original): The printer as claimed in claim 46, wherein said elastic body comprises rubber while said film comprises at least one of fine glass grains and fine ceramic grains.

Claim 48 (Original): The printer as claimed in claim 47, wherein said fine glass grains and said fine ceramic grains both are spherical.

Claim 49 (Original): The printer as claimed in claim 47, wherein said fine glass grains and said fine ceramic grains both are not spherical.

Claim 50 (Original): The printer as claimed in claim 46, further comprising cleaning means for removing ink deposited on a surface of said press roller.

Claim 51 (Original): The printer as claimed in claim 50, wherein said cleaning means is located between a position for transferring an image to the recording medium and a position for refeeding the recording medium, carrying the image on one side thereof, in a direction of rotation of said press roller.

Claim 52 (Original): The printer as claimed in claim 50, wherein said cleaning means comprises:

a roller pressed against said press roller by preselected pressure for wiping off ink deposited on said press roller; and

drive means for causing said roller to rotate at a peripheral speed different from a, peripheral speed of said press roller.

Claim 53 (Original): The printer as claimed in claim 52, wherein at least a surface of said roller is porous.

Claim 54 (Original): The printer as claimed in claim 50, wherein said cleaning means comprises:

coating means for coating a small amount of liquid on the surface of said press roller; and

a blade contacting the surface of said press roller.

Claim 55 (Original): The printer as claimed in claim 46, further comprising a roller pressed against said press roller by preselected pressure for removing ink deposited on the surface of said press roller by causing said ink to be transferred to said roller.

Claim 56 (Original): The printer as claimed in claim 55, wherein said roller comprises an elastic roller having an adhesive surface while said elastic roller comprises rubber and is caused to rotate by said press roller.

Claim 57 (Original): The printer as claimed in claim 55, wherein said roller is formed of either one of rubber and metal and has a smooth surface, said printer further comprising a blade configured to scrape off the ink deposited on said smooth surface.

Claims 58-69 (Canceled).

Claim 70 (Original): A printer operable in a duplex print mode for printing an image on one side of a sheet-like recording medium and then printing an image on the other side of said sheet-like recording medium, said printer comprising:

at least one print drum; and

at least one press roller facing said print drum for pressing the sheet-like recording medium against said print drum;

wherein said press roller comprises, when configured to press the other side of the sheet-like recording medium against said print drum, an elastic body having a surface formed with fine projections.

Claim 71 (Original): The printer as claimed in claim 70, wherein said elastic body comprises rubber while said projections are formed by at least one of fine glass grains and fine ceramic grains.

Claim 72 (Original): The printer as claimed in claim 71, wherein said fine glass grains and said fine ceramic grains both are spherical.

Claim 73 (Original): The printer as claimed in claim 71, wherein said fine glass grains and said fine ceramic grains both are not spherical.

Claim 74 (Original): The printer as claimed in claim 70, further comprising cleaning means for removing ink deposited on a surface of said press roller.

Claim 75 (Original): The printer as claimed in claim 74, wherein said cleaning means is located between a position for transferring an image to the recording medium and a position for refeeding the recording medium, which carries the image on one side thereof, in a direction of rotation of said press roller.

Claim 76 (Original): The printer as claimed in claim 74, wherein said cleaning means comprises:

a roller pressed against said press roller by preselected pressure for wiping off ink deposited on said press roller; and

drive means for causing said roller to rotate at a peripheral speed different from a peripheral speed of said press roller.

Claim 77 (Original): The printer as claimed in claim 74, wherein at least a surface of said roller is porous.

Claim 78 (Original): The printer as claimed in claim 74, wherein said cleaning means comprises:

coating means for coating a small amount of liquid on the surface of said press roller;
and

a blade contacting the surface of said press roller.

Claim 79 (Original): The printer as claimed in claim 70, further comprising a roller pressed against said press roller by preselected pressure for removing ink deposited on the surface of said press roller by causing said ink to be transferred to said roller.

Claim 80 (Original): The printer as claimed in claim 79, wherein said roller comprises an elastic roller having an adhesive surface while said elastic roller comprises rubber and is caused to rotate by said press roller.

Claim 81 (Original): The printer as claimed in claim 79, wherein said roller is formed of either one of rubber and metal and has a smooth surface, said printer further comprising a blade configured to scrape off the ink deposited on said smooth surface.

Claim 82 (Original): In a printer operable in a duplex print mode by forming in a master a first and a second image, which are to be respectively transferred to one side and the other side of a sheet-like recording medium, side by side in a circumferential direction of a print drum, wrapping said master around said print drum, pressing said sheet-like recording medium against said print drum with a press roller to thereby print said first image on said one side, and then pressing said sheet-like recording medium against said print drum with said press roller to thereby print said second image on said other side, said press roller comprises an elastic body having a surface formed with fine projections.

Claim 83 (Original): The printer as claimed in claim 82, wherein said elastic body comprises rubber while said projections are formed by at least one of fine glass grains and fine ceramic grains.

Claim 84 (Original): The printer as claimed in claim 83, wherein said fine glass grains and said fine ceramic grains both are spherical.

Claim 85 (Original): The printer as claimed in claim 83, wherein said fine glass grains and said fine ceramic grains both are not spherical.

Claim 86 (Original): The printer as claimed in claim 82, further comprising cleaning means for removing ink deposited on a surface of said press roller.

Claim 87 (Original): The printer as claimed in claim 86, wherein said cleaning means is located between a position for transferring an image to the recording medium and a position for refeeding the recording medium, which carries the image on one side thereof, in a direction of rotation of said press roller.

Claim 88 (Original): The printer as claimed in claim 86, wherein said cleaning means comprises:

a roller pressed against said press roller by preselected pressure for wiping off ink deposited on said press roller; and

drive means for causing said roller to rotate at a peripheral speed different from a peripheral speed of said press roller.

Claim 89 (Original): The printer as claimed in claim 88, wherein at least a surface of said roller is porous.

Claim 90 (Original): The printer as claimed in claim 86, wherein said cleaning means comprises:

coating means for coating a small amount of liquid on the surface of said press roller;
and
a blade contacting the surface of said press roller.

Claim 91 (Original): The printer as claimed in claim 82, further comprising a roller pressed against said press roller by preselected pressure for removing ink deposited on the surface of said press roller by causing said ink to be transferred to said roller.

Claim 92 (Original): The printer as claimed in claim 91, wherein said roller comprises an elastic roller having an adhesive surface while said elastic roller comprises rubber and is caused to rotate by said press roller.

Claim 93 (Original): The printer as claimed in claim 91, wherein said roller is formed of either one of rubber and metal and has a smooth surface, said printer further comprising a blade configured to scrape off the ink deposited on said smooth surface.

Claims 94-105 (Canceled).

Claim 106 (Original): A printer operable in a duplex print mode for printing an image on one side of a sheet-like recording medium and then printing, within 3 seconds, an image on the other side of said sheet-like recording medium, said printer comprising:
at least one print drum; and

at least one press roller facing said print drum for pressing the sheet-like recording medium against said print drum;

wherein said press roller comprises, when configured to press the other side of the sheet-like recording medium against said print drum, a surface formed with a number of projections, each having a peak provided with a radius of 0.04 mm or below, at a mean pitch of 0.4 mm or below.

Claim 107 (Original): The printer as claimed in claim 106, wherein said projections are formed of synthetic resin and provided with a conical or polygonal pyramidal shape whose peak angle is 100° or below each.

Claim 108 (Original): The printer as claimed in claim 107, wherein said projections are formed on an elongate sheet member having a preselected width and spirally wrapped around the surface of said press roller.

Claim 109 (Original): The printer as claimed in claim 106, further comprising cleaning means for removing ink deposited on the surface of said press roller.

Claim 110 (Original): The printer as claimed in claim 109, wherein said cleaning means comprises a porous cleaning roller caused to rotate at a lower peripheral speed than said press roller during printing.

Claim 111 (Original): The printer as claimed in claim 110, wherein said cleaning roller is pressed against said pressure roller by a biasing force of 3N or below.

Claim 112 (Original): In a printer operable in a duplex print mode by forming in a master a first and a second image, which are to be respectively transferred to one side and the other side of a sheet-like recording medium, side by side in a circumferential direction of a print drum, wrapping said master around said print drum, pressing said sheet-like recording medium against said print drum with a press roller to thereby print said first image on said one side, and then pressing, within 3 seconds, said sheet-like recording medium against said print drum with said press roller to thereby print said second image on said other side, said press roller comprises a surface formed with a number of projections, each having a peak provided with a radius of 0.04 mm or below, at a mean pitch of 0.4 or below.

Claim 113 (Original): The printer as claimed in claim 112, wherein said projections are formed of synthetic resin and provided with a conical or polygonal pyramidal shape whose peak angle is 100° or below each.

Claim 114 (Original): The printer as claimed in claim 113, wherein said projections are formed on an elongate sheet member having a preselected width and spirally wrapped around the surface of said press roller.

Claim 115 (Original): The printer as claimed in claim 112, further comprising cleaning means for removing ink deposited on the surface of said press roller.

Claim 116 (Original): The printer as claimed in claim 115, wherein said cleaning means comprises a porous cleaning roller caused to rotate at a lower peripheral speed than said press roller during printing.

Claim 117 (Original): The printer as claimed in claim 116, wherein said cleaning roller is pressed against said pressure roller by a biasing force of 3N or below.

Claims 118-123 (Canceled).

Claim 124 (Original): A printer operable in a duplex print mode for printing an image on one side of a sheet-like recording medium and then printing, within 3 seconds, an image on the other side of said sheet-like recording medium, said printer comprising:

at least one print drum; and

at least one press roller facing said print drum for pressing the sheet-like recording medium against said print drum;

wherein said press roller comprises, when configured to press the other side of the sheet-like recording medium against said print drum, a surface including a stepped portion formed by a number of spherical bodies, each having a radius of 0.1 mm or below, arranged with a maximum difference in height of 0.03 mm or above and a mean pitch of 0.15 mm or above between nearby highest peaks.

Claim 125 (Original): The printer as claimed in claim 124, wherein said projections are formed of synthetic resin and provided with a conical or polygonal pyramidal shape whose peak angle is 100° or below each.

Claim 126 (Original): The printer as claimed in claim 125, wherein said projections are formed on an elongate sheet member having a preselected width and spirally wrapped around the surface of said press roller.

Claim 127 (Original): The printer as claimed in claim 124, further comprising cleaning means for removing ink deposited on the surface of said press roller.

Claim 128 (Original): The printer as claimed in claim 127, wherein said cleaning means comprises a porous cleaning roller caused to rotate at a lower peripheral speed than said press roller during printing.

Claim 129 (Original): The printer as claimed in claim 128, wherein said cleaning roller is pressed against said pressure roller by a biasing force of 3N or below.

Claim 130 (Original): In a printer operable in a duplex print mode by forming in a master a first and a second image, which are to be respectively transferred to one side and the other side of a sheet-like recording medium, side by side in a circumferential direction of a print drum, wrapping said master around said print drum, pressing said sheet-like recording medium against said print drum with a press roller to thereby print said first image on said one side, and then pressing, within 3 seconds, said sheet-like pressing member against said print drum with said press roller to thereby print said second image on said other side, said press roller comprises a surface including a stepped portion formed by a number of spherical bodies, each having a radius of 0.1 mm or below, arranged with a maximum difference in height of 0.03 mm or above and a mean pitch of 0.15 mm or above between nearby highest peaks.

Claim 131 (Original): The printer as claimed in claim 130, wherein said projections are formed of synthetic resin and provided with a conical or polygonal pyramidal shape whose peak angle is 100° or below each.

Claim 132 (Original): The printer as claimed in claim 131, wherein said projections are formed on an elongate sheet member having a preselected width and spirally wrapped around the surface of said press roller.

Claim 133 (Original): The printer as claimed in claim 130, further comprising cleaning means for removing ink deposited on the surface of said press roller.

Claim 134 (Original): The printer as claimed in claim 133, wherein said cleaning means comprises a porous cleaning roller caused to rotate at a lower peripheral speed than said press roller during printing.

Claim 135 (Original): The printer as claimed in claim 134, wherein said cleaning roller is pressed against said pressure roller by a biasing force of 3N or below.

Claims 136-292 (Canceled).